

1 In the claims

1. A connection, comprising:
- a. an elongated tension member, having first and second ends, said
5 elongated tension member being anchored at said second end;
 - b. a fastening member attached to said elongated tension member at
said first end;
 - c. a resisting member that receives said elongated tension member
and is disposed between said fastening member and said second end
10 of said tension member;
 - d. an expansion device that receives said elongated tension member
there through and is compressively loaded between said fastening
member and said resisting member by operation of said fastening
member on said elongated tension member, said expansion device
15 comprising,
 - 1. a surrounding sleeve, having two ends, and a central
aperture through which said elongated tension member is
inserted, wherein a portion of said central aperture is formed as
a substantially cylindrical inner surface and wherein at least a
20 portion of said cylindrical inner surface is formed with a thread;
 - 2. first and second bearing members received in said central
aperture of said surrounding sleeve and operatively connected to
said surrounding sleeve, said first and second bearing members
also having apertures through which said elongated tension
25 member is inserted, and wherein at least one of said bearing
members has a cylindrical outer surface formed with a thread
that mates with said thread of said cylindrical inner surface of
said surrounding sleeve and is connected to said surrounding
sleeve only by the mating attachment of said thread on said
30 cylindrical outer surface with said thread of said surrounding
sleeve, such that said at least one bearing member can rotate in
relation to said surrounding sleeve, and said first and second
bearing members are formed with outer axial ends that protrude
out of said surrounding sleeve, said outer axial end of said first
35 bearing member contacting said fastening member, and said

1 outer axial end of said second bearing member contacting said
resisting member; and
3. a torsion spring connecting said first and second bearing
members, said torsion spring biasing said first and second
5 members in opposite rotational directions such that said at least
one of said bearing members is forced to rotate along said
thread of said surrounding sleeve away from said other bearing
member and out of said surrounding sleeve, said torsion spring
being disposed within said surrounding sleeve.

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Claims 2-20 (canceled)

21. (new) A connection, comprising:
a. an elongated tension member, having first and second ends, said
15 elongated tension member being anchored at said second end;
b. a fastening member attached to said elongated tension member at
said first end;
c. a resisting member that receives said elongated tension member
and is disposed between said fastening member and said second end
20 of said tension member;
d. an expansion device that receives said elongated tension member
there through and is compressively loaded between said fastening
member and said resisting member by operation of said fastening
member on said elongated tension member, said expansion device
25 comprising,
1. a surrounding sleeve, having two ends, and a central
aperture through which said elongated tension member is
inserted, wherein a portion of said central aperture is formed as
a substantially cylindrical inner surface and wherein at least a
30 portion of said cylindrical inner surface is formed with a thread;
2. first and second bearing members received in said central
aperture of said surrounding sleeve and operatively connected to
said surrounding sleeve, said first and second bearing members
also having apertures through which said elongated tension
35 member is inserted, and wherein at least one of said bearing
members has a cylindrical outer surface formed with a thread

1 that mates with said thread of said cylindrical inner surface of
said surrounding sleeve and is connected to said surrounding
sleeve only by the mating attachment of said thread on said
5 cylindrical outer surface with said thread of said surrounding
sleeve, such that said at least one bearing member can rotate in
relation to said surrounding sleeve, and said first and second
bearing members are formed with outer axial ends, said outer
axial end of said first bearing member contacting said fastening
10 member, and said outer axial end of said second bearing
member contacting said resisting member; and
3. a torsion spring connecting said first and second bearing
members, said torsion spring biasing said first and second
members in opposite rotational directions such that said at least
15 one of said bearing members is forced to rotate along said
thread of said surrounding sleeve away from said other bearing
member and out of said surrounding sleeve, said torsion spring
being disposed within said surrounding sleeve.

22. (new) A connection, comprising:
- 20 a. an elongated tension member, having first and second ends, said
elongated tension member being anchored at said second end;
- b. a fastening member attached to said elongated tension member at
said first end;
- c. a resisting member that receives said elongated tension member
25 and is disposed between said fastening member and said second end
of said tension member;
- d. an expansion device that receives said elongated tension member
there through and is compressively loaded between said fastening
member and said resisting member by operation of said fastening
30 member on said elongated tension member, said expansion device
comprising:
1. a surrounding sleeve, having two ends, and a central
aperture through which said elongated tension member is
inserted, wherein a portion of said central aperture is formed as
35 a substantially cylindrical inner surface and wherein at least a
portion of said cylindrical inner surface is formed with a thread;

1 2. first and second bearing members received in said central
aperture of said surrounding sleeve and operatively connected to
said surrounding sleeve, said first and second bearing members
5 also having apertures through which said elongated tension
member is inserted, and wherein at least one of said bearing
members has a cylindrical outer surface formed with a thread
that mates with said thread of said cylindrical inner surface of
said surrounding sleeve and is connected to said surrounding
10 sleeve only by the mating attachment of said thread on said
cylindrical outer surface with said thread of said surrounding
sleeve, such that said at least one bearing member can rotate in
relation to said surrounding sleeve, and said first and second
bearing members are formed with outer axial ends, said outer
15 axial end of said first bearing member contacting said fastening
member, and said outer axial end of said second bearing
member contacting said resisting member;
3. a torsion spring connecting said first and second bearing
members, said torsion spring biasing said first and second
20 members in opposite rotational directions such that said at least
one of said bearing members is forced to rotate along said
thread of said surrounding sleeve away from said other bearing
member and out of said surrounding sleeve, said torsion spring
being disposed within said surrounding sleeve; and
25 4. wherein both of said bearing members have cylindrical outer
surfaces formed with threads that mate with said thread of said
cylindrical inner surface of said surrounding sleeve, and both of
said bearing members are connected to said surrounding sleeve
only by the mating attachment of said threads on said cylindrical
30 outer surfaces with said thread of said surrounding sleeve, such
that both of said bearing members can rotate in relation to said
surrounding sleeve.

23. (new) The connection of claim 22, wherein:
a. said elongated tension member is at least partially formed with a
35 thread where said fastening member attaches to said elongated
tension member;

- 1 b. said fastening member attaches to said elongated tension
member by means of an internal thread that mates with said thread of
said elongated tension member; and
- 5 c. said thread of said surrounding sleeve is threaded in the
opposite direction as said thread of said elongated tension member.

24. (new) The connection of claim 22, wherein said expansion device
further comprises:
an inner sizing sleeve that is received by said surrounding sleeve and is
10 disposed between said torsion spring and said elongated tension
member.

25. (new) The connection of claim 22, wherein said expansion device
further comprises:
15 a locking clip that is releasably attached to said expansion device, said
locking clip holding said first and second bearing members so as to
prevent them from rotating under said influence of said torsion spring
and causing said device to expand.

20 26. (new) The connection of claim 22, wherein said expansion device
further comprises:
a pair of annular seals disposed at said ends of said surrounding sleeve
to protect said thread of said surrounding sleeve.

25 27. (new) The connection of claim 22, wherein:
a. said torsion spring is formed with first and second ends; and
b. said first and second bearing members are formed with annular
recesses that can receive said ends of said torsion spring so that
expansion device can be made more compact.

30 28. (new) The connection of claim 22, wherein:
a. said elongated tension member has first and second ends and said
fastening member, resisting member and expansion member are
disposed near said first end; and

35 b. said second end of said elongated tension member is connected to
a structural member in a building.

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29. (new) The connection of claim 28, wherein:
said building has a structural frame at least a portion of which is made
from wood.

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30. (new) The connection of claim 22, wherein:
said thread of said surrounding sleeve near at least one of said ends of
said surrounding sleeve is disturbed so that it is not possible for a
bearing member traveling on said thread to pass all the way out of said
surrounding sleeve.

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31. (new) The connection of claim 30, wherein:
a. said torsion spring is formed with first and second ends; and
b. said first and second bearing members are formed with annular
recesses that can receive said ends of said torsion spring so that
expansion device can be made more compact.

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32. (new) The connection of claim 31, wherein:
a. said elongated tension member is at least partially formed with a
thread where said fastening member attaches to said elongated
tension member;
b. said fastening member attaches to said elongated tension
member by means of an internal thread that mates with said thread of
said elongated tension member; and
c. said thread of said surrounding sleeve is threaded in the
opposite direction as said thread of said elongated tension member.

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33. (new) The connection of claim 32, wherein said expansion device
further comprises:
an inner sizing sleeve that is received by said surrounding sleeve and is
disposed between said torsion spring and said elongated tension
member.

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34. (new) The connection of claim 32, wherein said expansion device
further comprises:

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1 a locking clip that is releasably attached to said expansion device, said
locking clip holding said first and second bearing members so as to
prevent them from rotating under said influence of said torsion spring
and causing said device to expand.

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35. (new) The connection of claim 34, wherein said expansion device
further comprises:

a pair of annular seals disposed at said ends of said surrounding sleeve
to protect said thread of said surrounding sleeve.

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36. (new) The connection of claim 22, wherein:
said torsion spring connects to said first and second bearing members
near said outer axial ends of said bearing members.

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37. (new) The connection of claim 22, wherein:
said thread of said surrounding sleeve near at least one of said ends of
said surrounding sleeve is disturbed so that it is not possible for a
bearing member traveling on said thread to pass all the way out of said
surrounding sleeve.

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38. (new) The connection of claim 37, wherein:
said torsion spring connects to said first and second bearing members
near said outer axial ends of said bearing members.

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39. (new) The connection of claim 38, wherein said expansion device
further comprises:
an inner sizing sleeve that is received by said surrounding sleeve and is
disposed between said torsion spring and said elongated tension member.

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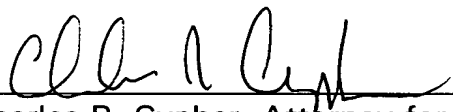
1 Conclusion

The undersigned wishes to state that if the Examiner has any questions, the undersigned would be happy to try to answer them by
5 telephone.

Respectfully submitted,

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